

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A method of humidifying a process gas stream for delivery to a fuel cell, the method comprising:

(a) introducing steam into the process gas stream, so as to humidify the process gas stream at a first temperature and so as to provide the process gas stream with excess humidity;

(b) cooling the process gas stream in a first heat exchanger at a second temperature, lower than the first temperature, to cause condensation of moisture;

(c) removing condensed moisture from the process gas stream;

(d) passing the process gas through a second heat exchanger to give the process gas stream a third temperature, and delivering the process gas stream at the third temperature, whereby the absolute humidity level in the process gas stream is determined from the maximum relative humidity at the second temperature;

(e) supplying the humidified process gas stream at the third temperature to the fuel cell; and

(f) providing a common coolant supply and removing excess heat from the first and second heat exchangers with the common coolant supply

wherein step (b) includes passing a first heat transfer fluid through the first heat exchanger to cool the process gas stream to the second temperature, step (d) comprises passing a second heat transfer fluid through the second heat exchanger to heat the process gas stream to the third temperature; and

wherein the method further includes passing the first heat transfer fluid through a first temperature control circuit, including a first heater and a third heat exchanger, for controlling the temperature of the first heat transfer fluid, passing the second heat

transfer fluid through a second temperature control circuit, including a second heater and a fourth heat exchanger, for controlling the temperature of the second heat transfer fluid, and passing coolant from the common coolant supply through the third and fourth heat exchangers.

Claim 2 (previously presented) A method as claimed in claim 1, wherein step (d) includes heating the process gas stream to the third temperature, whereby the third temperature is greater than the second temperature.

Claim 3 (cancelled)

Claim 4 (previously presented) A method as claimed in claim 2, which includes introducing steam into the gas stream in an amount sufficient to supersaturate the process gas stream.

Claim 5 (cancelled)

Claim 6 (previously presented) A method as claimed in claim 1, which includes maintaining the third temperature of the process gas stream, by delivering the process gas stream through a supply line, and providing a heating element extending along the supply line.

Claim 7 (original) A method as claimed in claim 2, wherein the first temperature is in the range 10 °C to 120°C.

Claim 8 (original) A method as claimed in claim 7, wherein the second temperature is in the range 5°C to 115°C.

Claim 9 (original) A method as claimed in claim 8, wherein the third temperature is in the range 10°C to 120°C, and wherein the relative humidity of the process gas stream at the third temperature is in the range of substantially 0 to 100%.

Claims 10 to 33 (cancelled)